

December 1, 1976  
Stimulus\* \* \* Response

"Playing club's neat, but there's work to be done. An organizational chart that's bigger than the membership's real cute, but. . .not interest[ing]."

"I see the needed work falling into 2 areas: propaganda/financing and systems design. That's mobilizing socio-economic force, and then having constructive channels outlined for it. What's doing?"

"Anyway, if you hadn't noticed (I almost didn't), 'Republican Harrison (Jack) Schmitt' the newspaper calls him, is now in the House of Representatives from New Mexico."

Neil Rest, 6256 North Winthrop, Chicago IL 60660

There is an error above: Harrison Schmitt is Senator of New Mexico, not Representative. This is better news, naturally. Schmitt will be in Congress for six years rather than two. More importantly, Walter Mondale, former Senator from Minnesota who is now Vice-President and who is a known anti-space advocate, has been replaced by the last (and 12th) person to explore the Moon's alien dimensions. The time grows near when the Fourth Petition, long postponed for various reasons, falls upon the heads of Congress like tiny meteorites swarming. Propaganda definitely is a primary concern. As we become accustomed to a larger resource base, greater attention will be paid to systems design. Systems design is at the core of colonology, the study of holistic realities such as ecology, anthropology, etc. At any rate, in any event, the Space Revolution is strengthened by the second astronaut to reach the Senate and public office. We should focus our local propaganda upon New Mexico and the Southwest as a proven political base for space sympathizers has been shown in the past besides Schmitt's election this year (Goldwaters in California and Arizona).

"What's doing" depends on you. If you are Robert Lovell, "What's doing" is going to conventions and distributing literature/propagandizing spacers for the organization and the Space Revolution as well as creating the multi-media production The Space Experience Experience, not to mention preparing thoughtful memos and letters to the rest of the Board. If you are Jeff Bytof, "What's doing" is long-range preparations for fundamental gravitational experiments, as well as strengthening relations between U.F.O.E.S.P. and other spacer organizations, not to mention providing useful information for CHRYSE. If you are Carol Andrews, "What's doing" is tending closely the post office box in San Francisco, providing shelter to spacers in the area organizing from out of town, and volunteering for delegations to various forums to argue for space. If you are Linda Strickler, "What's doing" is writing a monthly column for Morale Booster, keeping close watch on accounts, working many conventions for the organization, doing final production for our magazine. If you are Bruce Pittman, "What's doing" is being instrumental in the creation of the Science Advisory Committee which is sorely needed to organize the vast amounts of data generated by the Space Revolution's technology/science sections to transmit to the membership, while deepening involvement with the space frontier through working with NASA, attending technical conferences, and establishing a personal network of spacer contacts. If you are Michelle Klein, "What's doing" is publicity for U.F.O.E.S.P. at Star Trek gatherings, being

active in the L-5 Society. If you are Neil Rest, "What's doing" is communicating with the Board and. . . .

"Thanks for the Morale Booster and letter.

"Robert [Lovell]'s letter/comments are really fine. He. . . [has] a full understanding of this system and how U.F.O.E.S.P. fits and needs to fit. I agree there is a danger of being taken as 'nut cultists'. Anything that is radically different than our current 'white elephant' system will be approached with suspicion. The new member letter that Robert talks about would be a good way to bring a person on board. [We] already abound with high enthusiasm and people have a way of expecting a lot if there is a lot of enthusiasm. . . .

"Carter is President and Rosalynn is Vice-President. Could be a fine thing for our country. It may be a little harder to get funding for space projects, but if space is related strongly to what we are doing. . . on Earth then I believe it will be easier.

"For example. That dome in 'some[spacy]place' [in] Robert'[s] paint[ing] could be mass produced by some plexiglass company to create complete environments. If even one were built in Seattle, several in L.A., it would immediately have an effect on the folks around it.

"Most of the southeast-west exposures could have solar panels and the environment inside would be completely recycled. There are some folks already doing something like that. They have 12 acres on Prince Edward Island that are completely self-contained (only no dome). So, could do two things with these domes: learn how to function in a small, closed system and show people how good it can feel to live in a complete environment without smog and chemicals.

"I began composing that New Member News Letter [recently]. I need some information about a section of the letter titled 'Our Goals. . .' If you will send that [information] to me, I will incorporate it into my rough draft [before I] send you a copy. . . ."

Cynthia Randall, 5222 South Brighton, Seattle WA 98118

As the Space Revolution unfolds within the Solar System, the unity of knowledge and technology from one part of its domains to another becomes more apparent. At present, with only the inner planets sketchily surveyed, the statement appears more potential than actualized. Yet the outlines of development that can already be perceived leave little question as to the form of the future. Cynthia alludes to these outlines in her remarks about domes (the painting to which she refers is called 'There's no place like dome'). The structure invented by Buckminster Fuller many decades ago, the geodesical dome, has received greatest attention with reference to communal living and environmental consciousness. Yet its features are readily adaptable to alien environments. In some respects, the dome, as a structural design/principle, is enhanced off planet. For example, the strength to volume ratio would be more significant on Mars or Moon or Ceres than on Earth so that very large structures enclosing great volumes fabricated from light-weight or structurally weak materials could be assembled by five or seven persons. Structures enclosing volumes large enough to permit atmospheres and weather (an example of this for a non-spherical structure is the Vehicle Assembly Building at Cape Canaveral). Plastics research has progressed to the point where an inflatable dome could be readily designed that would have refraction co-efficients such that harmful ultraviolet flux would be rendered suitable for human requirements (and plants and other animals as well).

What you are talking about, Cynthia, is the second half of Neil Rest's formulation above as to the work before us. System design, in one form or another is the core of colonology, the science of community construction "all at once". The discipline is so new, so vast that it will be many years before a general idea is obtained as to the parameters of greatest significance, the event and reinforcement contingencies causally linked to particular social designs, etc. However, there are many and varied attempts to create the science. Ecologists, NASA, the World Game at a Midwestern University, the whole range of spacer groups such as ourselves (if only indirectly), the International Society of Free Space Colonizers, L-5 Society, etc., represent some of these approaches and by no means exhaust the list. Long before the space colonies, be they space stations, planetary bases, vacuum habitats, hollowed asteroids, or what-have-you, are actually established beyond the Earth's atmosphere models, prototypes, simulations, and analogues will be constructed on Earth and inhabited. The questions go far beyond the simple physical dimensions of analysis. Social and cultural factors of a large and essentially unknown sort will have to be identified precisely, ordered in some logical and empirical fashion, presented as models, hypothesized, experimented, adjusted, and start all over again. . . and again. Colonology is the great synthetic science and so all spacers must become good synthesists to one extent or another. It's a great future!

The Board of Governors appreciates aid of all sorts from those associated with us in many forms. It is always gratifying when a person with a passive relationship to U.F.O.E.S.P. volunteers more than formal agreement to permit the organization to send him or her mail. The literature that needs to be written is enormous, from one-page flyers to treatises. No matter how limited anyone's literacy, some useful work can be contributed. Not only can one donate ideas (ideas are cheap) but one can write casual or intense letters to the Board which can be printed in MB. One can outline some literary project, short or long. There are committees of all sorts which can be arranged to do useful construction for U.F.O.E.S.P. The fact of contribution to the Space Revolution, at least at this stage, is more important than the fact of the contribution's quantity. Let's build! Let's roll! Let's get it on!

"I've had [the President]'s letter of the 13th of September for awhile now, and frankly, have not been sure how to answer it. I enjoyed and reveled over the soundness and vision inherent in G's plans; at the same time, the semi-formal tone led me to wonder if the letter was a put-on of some sort if G. had gone off a deep end of something. | 'Cor-dially, J. Graham Maughan, President'. Jeez!

"Again, if you have not been getting Co-Evolution Quarterly, spend ten bucks for last few back issues at \$2.50 each and get a current sub. at \$8.00. They are on top of the NASA space developments in a way that is direct and folksy, but at the same time, very informative and frequently no less than first (or second) person.

"I saw 'Zardoz' and 'The Man Who Fell To Earth' as a double-feature, and am currently a little spaced from the experience. I would be interested in hearing the Spacerz group you spoke of, as I thought [David Bowie] did a pretty fair job.

"With regard to what I called the 'semi-formal' tone of [G's] letter, I do recognize however, a multi-levelled mind at work. . .and I do realize the value of the organizational mind-set it puts a person in, to structure their language and express it in the fashion [he] did. . .

". . .You DO have to seduce and cajole today: people are either

turned-off or on their own trips already (i.e., by the time you get to them). So my energy has been somewhat self-defeating since I have actively NOT done any campaigning, hating, as I deeply do, general salesmanship and seeing clearly the Troublesomeness of the whole real estate/profit/speculation phase of history we are in.

" . . . Much time is spent sending people information and answering their (superficial) probes, 95% of which end with the first contact. For my part, I enjoy the scene, but I am also loathe to work at the pace and with the intensity that is really required to pull [anything] off at the level of involvement that would really produce substantial organization and fullness of participation. I think we will see stages of dormancy in the organization, and in fact, a lot of time when [we] . . . have. . . énergies and interests elsewhere. . .

"I understand there will be another Star Strek conference in Seattle this January. I cannot imagine it: that goddamned show really turned people on. I missed a [Public Broadcasting Station] talkshow the other night where they had Leonard Nimoy. . . talking about his life, his role as Spock, and his feelings about the whole mind-set of space. . .

"Enclosed, by the way, are my membership dues. . ."

Thomas P. Bahr, 1282 Lake Drive Road, RR3 Sedro-Woolley WA 98284

One of many paradoxes about the Space Revolution is the simultaneous fast and retarded progress which characterizes the Revolution's construction. This duality arises from the many constituent reactions of the Revolution possessing many time frames and many rates. Although your remarks, Tom, are for the general case, their applicability for our narrow interests is obvious. The organization makes hundreds of contacts and gets a low response. Of those who respond, perhaps 10% do so more than once. The tasks to hand, the organizational extensions, the resource collection, catalogueing, and manufacture require such energy expenditure, labor outlays, and time constraints that even the prospect of millions of spacers working towards the same ends seems inadequate. The more we do, the more there is to do and this relation often has the quality of a task which becomes increasingly difficult to complete the more effort put to doing so. However, the rapidity with which the Space Revolution develops crashes into our consciousness occasionally, too. In just over a year, the membership could well total near a thousand. In a few months the organization will have doubled the number of conferences to which delegations have been sent in the past two years. In the few months past, the Board of Governors has been strengthened by the addition of three new or rejuvenated positions which, besides stroking the egos concerned, enables (and has enabled) U.F.O.E.S.P. to have direct representation from one end of the country to the other as well as access to the central powers of some important spacer organizations. So we build. All the time. On all levels. As much as we can.

While at the Jet Propulsion Laboratory for the FASST/AIAA Conference, the delegation met a person quite involved with Star Trek fans. He estimated, and the delegation had no reason to doubt him, that there may be as many as three to four million people in the U.S. who are committed to the series in varying degree. Although only 10,000 of these millions were considered to be very active and dedicated to the series, it is important to note that only 10,000 to 15,000 letters were required to keep the show on the air for additional year(s) and to change the name of the first Space Shuttle from Constitution to Enterprise. There is power here! This is why the organization must turn great attention to making Star Trek afficianados a political force.

## FROM THE INSIDE WORLD

ФИФО ФИФО

It goes without saying that the Space Revolution, being a supremely technological undertaking, requires all who would understand, let alone affect, its course must be versed in scientific language and technical perspectives. There is no one way to acquire best this information and familiarity and the Board of Governors has adopted many approaches with respect to this issue in Morale Booster in the past. It was early decided to reserve a specific portion of every issue of MB for presenting technical topics and the column first appeared as "Voices From the Outside World".

For the first months the column presented current events of the expansion of humanity into outer space through quotes of news accounts of spacer events like satellite launches, future planetary mission profiles, the Apollo-Soyuz Test Project, foreign launches and the like. In addition, quotes were included of news accounts of more general nature with reference to space: discoveries of new celestial objects, reports of findings of experiments from probes and lunar instruments, telescope construction (Kitt Peak, the Crimean Observatory), etc. Two ends were sought with this approach: education of the membership about matters of importance and interest to them and some feeling for the immediacy of the Space Revolution through quotations from the daily newspaper or weekly magazine. However, there were difficulties with this format, not the least of which was the work associated with getting approval to quote in MB for purely mechanical copyright reasons. Thus, direct quotation as the structure of the column was dropped.

Beginning with the October 1975 issue this column appeared under the name "Voices From the Inside World". Although the space events reported in previous installments remained the center of attention, the news quotes were replaced by a personal report by a member of the Board of Governors. As the months went by, the form tended to be more general and philosophical than before although the factual points were technical ones in any case. An overview is not without merit but the Board has felt that the membership would benefit and prefer a presentation with higher contrast compared to the usual tone of the articles. In lieu of anything more substantial than what could be produced at the time, the Board made do with further offerings of less technical discussions in "Voices. . .".

In the past few weeks the organization has had the good fortune to witness two members pool their initiative and interests to create a technical committee which will undertake to improve the membership's understanding of some of the specifics of the Space Revolution's hardware and lines of development. The Science Advisory Committee has two members and is incorporating a third with room no doubt in the future for more. Jeff Bytof, Assistant President for Interorganizational Affairs, and Robert Bruce Pittman are two able individuals who have access to much detailed data and useful information. The committee is still evolving (any with technical bents should write to Jeff or Bruce; see past issues [May, July, August] for addresses and phone numbers) but it is expected that it will report to the membership periodically its findings or investigations or analyses.

The coming months will see another evolution of this column as it becomes the channel from the committee to the membership in a more regular way. It is hoped that the committee will be able to undertake the writing of "Voices. . ." (or whatever they might choose to call it) each month. Naturally, with their personal obligations to the Space Revolution, there will be some fits and starts. Nonetheless, its growing expertise, experience, and development will insure eventual solid links amongst all concerned. The final products will undergo many modifications but the outlines can be discerned and should remain stable for the next few months.

The Science Advisory Committee will have a broad range of interests and will pursue them no doubt eclectically as befits the characters of its members. Yet it seems inevitable that soon it will embroil itself in technical questions related to long term

human habitation of space. Although experience tends to confirm the notion that no barriers exist to long-term occupancy of the vacuum, that same experience is so limited in terms of individuals, time off planet, regions of space experienced, etc. that it is difficult to evaluate the larger question. Then too, some research suggests that definite areas of difficulty exist. For example, our Assistant President for Interorganizational Affairs recently wrote to the Board about a NASA publication of the late 1960s which detailed some experiments in which rats were raised in two environments, one with and the other without Earth's magnetic field with results which suggested that a magnetic field may be necessary for the proper maturation of the individual and preservation of the reproductive capacities of Earth species. Although space medicine and biology have been major topics from the beginning of the Space Revolution, there are still many questions which are unresolved and whose answers are vital for the prospects of expansion into space. Another example, such as the one given in the next-to-previous sentence, would be the physiological consequences of high density living which any (initial) space colony must undergo.

The Science Advisory Committee will have many areas of strong interest and great use to the membership's education and the organization's preparation for spacer events. No doubt at some time the committee will turn its attention to technical matters related to legislation before Congress or elsewhere (California, for one state, is showing interest in the space program's uses for it). The Space Revolution is the complete expression of science and technology intersecting human interactions. Politicians, like all others, in their dealings with the Space Revolution must master technical details. Moreover, their interest is heightened, if only on the general level, as a consequence of their control of the funding for the major developments of the Space Revolution. When we write to our Congresspeople, Governors, political party leaders, and others of such profession, we must be able to support specific pieces of legislation or courses of future action not only clearly and concisely but also precisely. The Science Advisory Committee can provide fundamental service to our work through providing the Board and membership with precise information related to specific legislative proposals. No doubt the Board, or some other formation within it, would provide the committee the information it would need to know about the content of the specific political matters or bills in question. Since the members of the committee cannot possibly study everything related to the Space Revolution, even when limited to the hardware, they will have to pick and choose projects to investigate.

Yet a third value to be gained from diligent work by the Science Advisory Committee derives from the interaction inevitable between the committee and other spacer organizations. The Space Revolution grows every day in scope and impact but its history and nature have resulted in emphasis upon hardware and technology. It is no surprise that the private groups which have organized in support of the expansion of civilization into space have more often than not been technically oriented. The British Interplanetary Society, the L-5 Society, the International Committee for a New Planet, the American Institute of Aeronautics and Astronautics, and the International Astronautical Federation are only a few examples of this trend or response. A major function of each of these and similar groups is the distribution of information and technical data about the Space Revolution not only to the general public or to responsible governmental personnel but also amongst one another. Probably one of the very first tasks undertaken by the committee will be establishing informational links and channels with as many other spacer organizations devoted to technical questions for the most part as possible. This development could in turn lead to the realization of the Science Advisory Committee as the major channel of communication with technical groups for U.F.O.E.S.P. The levels of integration of interest and activity of the Space Revolution will be created and structured by spacers working from many directions.

Next month we will continue with our usual discussions of technical matters and spacer events of the world. This year and the one to come will be ones of seeming quiet and modest achievement. In fact, this time prepares us for the advances of the last years of this decade and the Thundering Eighties to come. WE must follow today's leaps into space closely if we are to build properly in the near future.

Last month, "Love In Space" discussed the general question of intimate human interaction from the theoretical perspective of love. In a sense, this discussion was one concerning the dynamics of intimate human interaction in that broad trends and general processes were the heart of the discussion. This month, we investigate the question of intimate human interaction from the practical perspective of sex. In contrast to our remarks about love, the arguments to be made here concern the mechanics of intimate human interaction. As A. and M. Bannatyne in their work How Your Children Can Learn to Live a Rewarding Life (p. 73) remark, ". . . if there are no acts of love there is no love. . ." Certainly, sexual acts by no means define the entire set of acts of love, not even a majority of this set, but the fact that they are acts of love cannot be denied either.

Before the main discussion, two points should be noted about the matter at hand. Although the reader will no doubt envision the future interactions of spacers with reference to a balanced population of males and females, he or she should also keep constantly in mind that the necessity for love (as defined by Ashley Montagu in his work The Nature of Human Aggression) would lead to much of what follows even if the sexual ratio were to be greatly skewed one direction or another. It might be discovered, for example, that women were better able to adjust to the cosmic radiation of interplanetary space and so space exploration might thus become dominated by women.

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of studies of groups (prisons or other institutions, for example) in which  
the sexual ratio is quite distorted, confirm the basic outlines and fundamental conclusions reached here.

The second point the reader should note before we begin to discuss sex in space in depth is the extrapolative nature of the discussion's framework. It is not foreordained that social relations proceed as outlined here. The variables governing intimate intercourse are complex where known. Many chance events will occur in the next ten or twenty years to randomly influence significantly the course of the Space Revolution. Without question, if spacers are to realize the full potential of the species along any dimension, sexual or otherwise, they will have to take command of their lives and consciously structure them using whatever practical or objective or behavior techniques they can devise. Yet the history of the Space Revolution to date, the requirements of the environments beyond Earth's atmosphere, and the genetic gregariousness or sociality of the species impose constraints which shape the future along the lines presented in this article. The reader must remind self occasionally about this dialectical relation between the creative possibilities of society and the objective requirements for adaptation to the most alien worlds and spaces in order to sense the full range of evolution from which this particular presentation is drawn.

Two of the most important factors concerning the expansion of civilization off planet are the eventual long-term missions' domination of the exploration and use of outer space and the pressing need to recognize, on the part of those building civilization on other worlds or spaces, the greatest range of capabilities in people as possible. One of the most wretched observations of our past history as a civilized species that can be made is the predominance of institutionalized oppression characteristic of human society. One of the most hopeful and welcome developments of the recent past that can be made is the assault on these bastions of oppre-

ssion by women, minorities, and the underprivileged around the world. The changes brought about in this regard are not only the results of the insistent, strident, and militant demands of the misused and abused of the planet. In part these changes have resulted in the (slow) satisfaction of the peoples' needs by rising industrialization. And in part, these improvements are the result of the increased value of every individual's possible contribution to the State through education, government planning, and the stringent requirements (intellectual, artistic, and adaptive) of the technical and scientific processes which underlie and underpin the industrialization of the planet.

With reference to copulation in the Void, the last two of the three reasons given for the assault on the bastions of oppression of recent times mean heightened recognition of each individual's worth and importance to the proper maintenance of healthy (intuitively understood for the moment) community interactions/intercourse. Whether the group under consideration is some small outpost on Mars or Titan, an enormous O'Neill Habitat, booming space station, or lunar mining institute/town, the tasks before the colonists will be so large, numerous, long-range, and (often) deadly that the colonists will be forced to maximize all personal and personnel resources available to them. All considerations of personal qualities not relevant or vital for the highest performance of the community will be devalued, de-emphasized, and classified as of secondary importance. If the color of skin were to be determined to be decisively significant for existence off planet, then a logical (and necessary) racism will occur. If, contrarily and more likely (given the normally high levels of radiation flux on other worlds and spaces), skin color has no perceptible or important bearing on survival in the Void, then individuals will be selected in or out of the community without reference to this factor. The point being made is that personal considerations which are the province of the individual on Earth will become community issues off planet in the direction of emphasis upon extracting maximum benefit from all members.

There is more to this situation than sheer or mere maximal exploitation. Due to the increasing sophistication of the population from which the colonists are drawn, the technological foundation for off-planet living, and the unexpected resources which accrue from any basic exploratory adventure, each individual colonist will have more to offer the community with time. This is to be understood both in the personal sense of any particular colonist and in the generic sense of the single human unit. The distances around the Solar System are such that it will be a long time before it is really cheap to send mass around it at will or fancy. Consequently, every colonist who finishes training (on Earth or otherwise) will possess much knowledge, refined skills, quick habits of mind, familiarity with and acceptance of a broad range of physical and social environments, as well as many other attributes concomitant with survival in alien and distant places. The simple truth about colonization of the Solar System is that the only thing that can be achieved by trying to colonize by brute force is oblivion. Humans are too weak as a species to master the Void except through co-operation.

Now we can stop beating around the bush. All of the preceding remarks lead to the conclusion that every effort will be made to insure the reliability and healthy functioning of each colonist. The most obvious parameters, such as proper oxygen regeneration of the habitat or the most balanced meals technology can provide off planet, need not bother us here. Such psychological or social parameters as the degree of stimulation and interest of the environment, emotional compatibility of the colonists, or extent of diffusion of leadership within the community have been discussed to some extent in "Love In Space" or will be explored later. In this context, the parameters which are significant are the physiological and psychological ones associated with sexual behavior.

One need not be a proponent of Wilhelm Reich or Sigmund Freud or the Marquis de Sade to recognize the importance of sexuality in human life and individual development. The more that is learned about erotic behavior and its interface with mind and body, the greater becomes the awareness that a full expression of sexuality is not only not harmful but desirable. Copulation is good exercise for muscle tone. Orgasms bring a strengthened sense of worth ability to respond deeply to others. Liaisons give purpose and organization to daily existence. The seductions, matings, lusty provocations in which all engage, how-

ever fitfully, bring entertainment, solace, and physical excitement. As the awareness of sexuality's importance to healthy human development has grown over the past fifteen years, so has grown the movement for individual sexual rights and expansion.

Deep in space, as noted last month and in this article's opening remarks, the social emphasis is upon love (behaviorally defined). This means the acts of love will be duly emphasized. It would be incorrect to imagine the space communities to be typically orgiastic or centers of iniquity. Yet there is good reason to expect the physical interactions of the spacers of Mars, L-5, Luna U or wherever to be more explicit expressions of love than on teeming Earth. Rather than serving as the source of divisive emotions, these mutual expressions of intimate affection will create solidarity among spacers. Every person's function will be vital to the community. It will be many decades before space communities can afford idlers, loafers, or adult non-producers. The services rendered by each community member will not be superfluous. Thus, it will be in everyone's benefit to increase the contentment, self-satisfaction, harmonizing relationships of the member to the greater group. The smooth interpenetration of all the many tasks which are essential to the survival of off-planet communities can only be maximally heightened by the liberal application of caresses, endearments, provocative

Interlude 3

Δ "Who are we?" "How did we get here?" "Are we alone in the Uni- Δ  
Δ verse?" The answers to these questions have broad scientific Δ  
Δ implications, as well as deep philosophical, sociological, and Δ  
Δ theological meaning. The search for extraterrestrial intell- Δ  
Δ igence has begun! Δ

The Forum for the Advancement of Students in Science and Technology (FASST), the Student Programs Division of the American Institute of Aeronautics and Astronautics (AIAA), and the Educational Programs Office of the NASA/Ames Research Center, invite you to take part in the search by participating in a special symposium, "The Search for Extraterrestrial Intelligence (SETI)." The program will be held at the Ames Research Center, near San Francisco, on February 24-25, 1977. Speakers and participant discussion groups will cover such topics as: "The Cosmic Picture--Is Anyone Really Out There?" "The Origin of Life--Chemical and Biological Considerations" "Evolution of Technological Civilizations" "Methods and Technology for the Search" and "Cultural Implications of Detection and Contact with Extraterrestrial Intelligence."

Confirmed speakers for the symposium include Dr. Richard Berendzen, astronomer, lecturer, author and Chairman for the Boston SETI symposium, "Life in the Mind of Man"; Dr. John Billingham, Chief, Program Office for SETI-NASA/Ames; Ronald Bracewell, Professor/Stanford University and author of THE GALACTIC CLUB; David Black, Project scientist/SETI; Dr. James Christian, philosopher and author of EXTRATERRESTRIAL INTELLIGENCE: The First Encounter; and Bernard Oliver, Vice President for Research, Hewlett-Packard, and formerly Director of the study group on constructing large arrays of radio telescopes, designated Project Cyclops. We are awaiting confirmation of Dr. Carl Sagan, astronomer/biologist, and Dr. Stanley Miller, biochemist.

Directed, primarily, toward college and university students, the symposium also welcomes participation by interested professionals and faculty members. A wide cross section of academic disciplines will be involved, including students in...

gestures, and open enticements from one colonist to another. Without question, there is much work to be done to establish a space community and the colonists will no doubt have most of their energies consumed by the survival tasks to hand. The time devoted to idle pursuits of comfort or to bursts of genital passion will be a small part of the community life if only because of constraints imposed by time, flesh, and alien environments. But the intercourse which remains will be both more intense / more extensive, and more discreet than the typical Terran society.

There has been much noise about loosening sexual morality in the nation during the past decade and one-half. There will be even greater noise about sex in space for most of the broad range of sexual activity will be actualized more consistently in space. Perhaps the greatest difference between the old Earth and the New Worlds will be the free formation of intimate attachments going beyond monogamy likely to be characteristic of the love life off planet. It is not difficult to understand why this change might be expected. The communities in question will not be able to withstand for very long the ravages of jealousy without severe impairment of their survival capacities. In order for cooperation to be maximized, as few divisions between the colonists as possible must be attained. Sexual encounters, being merely an extension of both basic physiological requirements and the exploration of personality which sociality implies, will be numerous, varied, and regular.

For we must remember that Death goes hand-in-hand with Exploration and Colonization. The communities of Mars or Luna U will be small ones and the personnel will be more or less committed to them, whether they like it or not, for many years at a stretch. Many pioneers will die and the community cannot tolerate many loose ends for extended periods. It is common the world over for humans to draw together in the face of calamity and personal tragedy. In space, the solace and communal support which will surround these moments of Death or Great Injury will be also more intense to compensate for the loneliness of Mars, L-5 or the Asteroid Belt. Perhaps there will be some hybrid of grief and elation; perhaps there will be a wake after great mourning; there is no reason to rule out sexual practices. For in Death is Birth or Life and all creation is an act of ecstatic/erotic/sensual/electrical dimensions.

There are other reasons to expect the space colonists to devalue monogamy. It is generally agreed that the majority of these people will be young and single. Since it will be many years before even primitive communities are established off planet and the trends of sexual liberation and personal exploration we observe now will only continue on a larger scale into the future, the colonists will be individuals who are accustomed to many partners, even if only serially, great diversity of personal expression and experience, not to mention vigorous physical activity. The tendency of interpersonal interaction will be towards experimentation with many individuals on emotional, intellectual, and most particularly sexual levels.

Heterosexuality, most definitely of an exclusive nature, will also be devalued not only because the personal, private experiences of the colonists are likely to have

included such experiences but the demographics of isolation and small community size will lead to acceptance of a broader range of sexual behavior than the typically conservative range of Terran society. This is not to say that homosexual relations of an exclusive nature will be emphasized. Rather, the sexual relations of the colonists will take on an increasingly bisexual character with the colonists emphasizing the personal qualities of their partners over purely physiological ones. Of much greater importance to those living off planet than the gender of the other individual will be the idiosyncratic personal chemistry of two (or more) distinct egos.

In general, a much more flexible and varied set of sexual attitudes, preferences, and attachments will be shared by spacers than by the Earthbound. Intimate commitments are likely to range from the familiar couple to groups of four or five or higher with sexual ratios spread across an equally wide interval. The forces working for such an outcome go beyond the physical parameters, the social considerations, the adaptive requirements, or secondary historical trends discussed in these pages. Perhaps the greatest of these other forces is the consciousness of the spacers themselves. The colonies will be planned along the spectrum of relevant parameters and not limited to the simply physical ones. Many diverse views will hold forth on the question of the social structure of space communities. Even if evolution of society off planet were to follow strictly the lines outlined in this article and "Love In Space", there would still be a fantastic array of cultural traits and practices on other worlds and spaces. Since conservatism is by definition a constraining philosophy, there is every reason to expect liberal philosophies to prevail off planet given the demands of survival for the broadest range of options. The colonists will insist upon thorough examination of all programs and will tend to maximize those aspects which contribute most to efficiency and comfort under strange stars and skies. It cannot be denied that arbitrary or violent forms of social order are possible and capable of spontaneous generation at the very least. But spacers will not leave Earth simply to bring all the garbage and excess social baggage Earth spawns with them to the Void. The expansion of civilization into outer space is an inherently utopian venture and as such it is one directed toward positive ideals (affirmation rather than negation) and viewed by the builders as under rational control. There is no point arguing this matter: space communities are planned communities and they will not be purposely planned badly.

Sex in space will be frequent, intense, varied, but fundamentally the expression of stable social relations. Rather than serving as a force of division as it does on the authoritarian, propertarian, and patriarchal Earth, sex and sexual acts will unify, solidify, and expand the network of responsibility and obligation which characterizes utopian community. One must not think that an idyllic future of copulation is foreseen. There will be frustrations, disappointments, rivalries, and wrenchings enough building civilization off planet to keep all the true romance addicts happy. There will be space operas on the telly in the most soapish sense! But all that fellatio, cunnilingus, anal intercourse, group sex, masturbation, mechanical stimulation, and French kissing driving the social relations of the future space operas will in fact strengthen the space communities' abilities to survive and prosper in alien environments.

The sexual evolution of social interaction in space may constitute the single most important dimension of civilization's expansion off Earth to Moon, Mars, Jupiter and the interplanetary medium beyond. It may be argued quite forcefully that the roots of human harmony and discord lie in the ordering of sexual relations and their consequences in society. The respect we feel for other people, the sense of our own self-worth, our capacity to interact harmoniously with our fellows, the very physical well-being of the individual can all be traced to sexual maturation, experience, and behavior of each person. In order to establish human communities permanently off planet, the people engaged in the effort must come to grips with sexual relations in a radical way. All the old ways must be questioned and for the most part discarded for their very structure enhances hostility and suspicion between groups and individuals. No final answers will be sought for no final answers are possible. The ways and means of society must evolve continuously as humanity expands throughout the Solar System. But the initial resolutions to sexual and social relations will be nonetheless radical. The confluence of factors and forces is too great to permit otherwise. \*\*\*\* J. Graham Maughan

Treasurer's Report  
December 23, 1976

Last issue thoughts of war and destruction began this column. Gladly this issue brings thoughts of peace and prosperity in space. The lastest issue of Time magazine has a cover story entitled "STARS: Where Life Begins" which, unlike the article in Newsweek on space war, I read and relished. It is an excellent article for the lay person and I highly recommend it. Especially beautiful are the color photographs showing the sunset on Mars (the best photo so far!), the Orion Nebula with new stars forming, and the Crab Nebula in Taurus showing a supernova remnant. This article is written on a very complex subject but the author (unnamed) did an excellent job of writing clear and understandable explanations of heavenly phenomena. It would make a lovely post-Christmas present for any spacer on your list--so pick up an extra copy of Time this week.

"STARS: Where Life Begins"--what a beautiful reality. Now when some nonspacers asks me why I devote myself to Space I can be even firmer in my presentation. I would like to quote just a few lines:

In fact, the earth and its star--the sun--are built in part from the ashes of dead stars, and human beings are literally star children. People--and all other forms of life on earth--are collections of atoms forged in stellar furnaces. 'All of chemistry and therefore all of life has been formed by stars,' says Astrophysicist Patrick Thaddeus of NASA's Goddard Institute for Space Studies in New York City. 'With the exception of hydrogen, everything in our bodies has been produced in the thermonuclear reactions within stars.' (p. 30, Time, December 27, 1976.)

Beautifully put! So we are literally star children, are we? Well, it is time we moved into our rightful domain. I write this now on New Years Eve and I feel impelled to remark on the coming new year, but on the last as well. It has been a good year for U.F.O.E.S.P. and it will be reviewed in the appropriate Morale Booster by chronological date. Still it is nice to review the progress here as well. We have grown in numbers and strength this past year and will grow even bigger next. Our resources have increased in every conceivable way. We have met and talked with many spacers who are intimately involved in the Space Revolution. We should not feel that our organization has been ineffectual. We must simply remember that we are still small and time will automatically influence that in a positive way. We should feel proud of our aims. They are lofty, but they are realistic as well.

Now, I would like to discuss the financial situation of the Concrete Treasury. Because we have not paid the printing costs of the last two Morale Boosters, we are currently in the black. We have recently submitted the fee for the Post Office Box renewal and also sent partial payment for printing of one of the MBs. If we were to pay our debts in full, we would be in the red--and since there is no slack at the moment, we must consider ourselves to be on a brink of sorts. However, there are several income possibilities which are only weeks away now, so there is no reason for alarm yet. We have skated this close to the edge before but we have always pulled up before it was too late. We feel confidence in U.F.O.E.S.P.